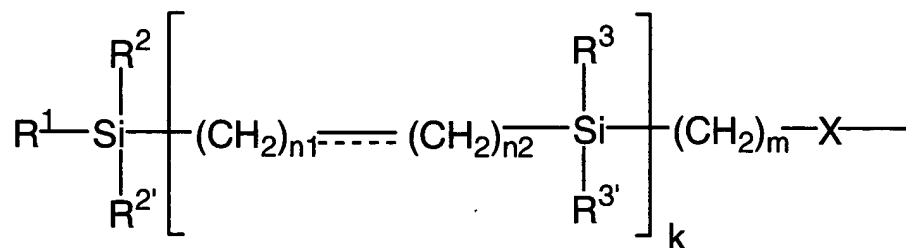


where D is:



where:

R^1 is an alkyl or alkenyl group having j carbon atoms and R^2 , $R^{2'}$, R^3 and $R^{3'}$, independently of one another, are alkyl groups having from 1-6 carbon atoms;

$n1$ and m are integers from 1 to about 20;

$n2$ can be zero or an integer from 1 to 20 where the dashed line indicates a possible double or triple bond;

k is 0 or an integer from 1 to 10;

X is oxygen or a single bond; and

j is an integer from 1 to 18;

B,
cont.

and

wherein a , b , x , y , z can be 0 or 1 ; $x + y + z$ is 1, 2 or 3, when x is 0, a is 0; when z is 0, b is 0;

A and B , independently, when present, can be $-O-$, $-COO-$, $-OOC-$, $-CH_2-CH_2-$, $-CH=CH-$, $-C\equiv C-$, $-CH=CH-CH=CH-$, $-O-CH_2-$ or $-CH_2-O$;

the A , B and C rings, independently of one another, are aromatic rings or alicyclic rings, where one or two carbons in the A , B or C rings that are aromatic can be replaced with a N , O or S and one or two of the carbons in the A , B or C rings that are alicyclic can be replaced with a N , O or S or a $C=O$ group; provided that the A , B or C rings are not a 3,4-difluoropyridine ring;

Y can represent up to four substituents on aromatic rings and up to 10 substituents on an alicyclic ring where Y can a halogen, CN group, NO_2 , alkyl or alkoxy;

B₁
cont

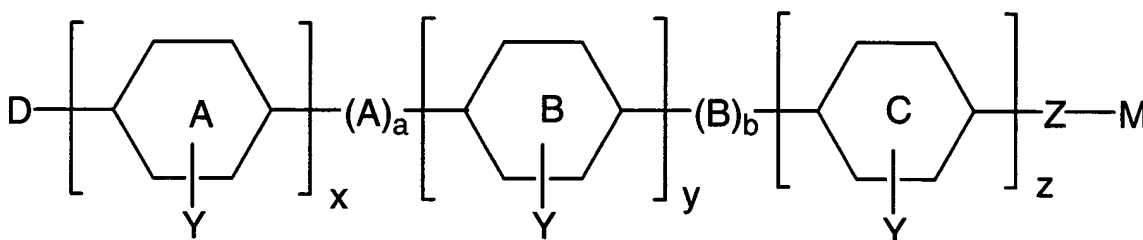
Z is a single bond, an -O- or a -COO- or -OOC- group, and

M is a tail group which can be:

a non-fluorinated alkyl, or ether group or R^F,

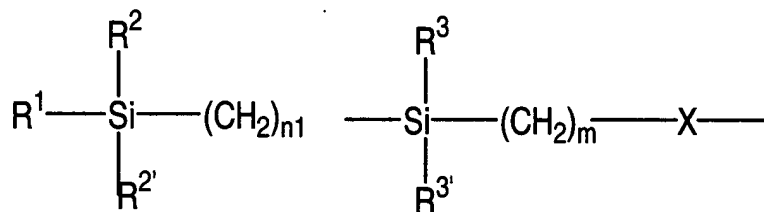
where R^F is an alkyl, or ether group which is fully or partially fluorinated.

11. (Once amended) A liquid crystal composition comprising one or more compounds of formula:



where D is:

B₂



where:

R¹ is an alkyl or alkenyl group having j carbon atoms and R², R^{2'}, R³ and R^{3'}, independently of one another, are alkyl groups having from 1-6 carbon atoms;

n₁ and m are integers from 1 to about 20;

X is oxygen or a single bond; and

j is an integer from 1 to 18;

and

wherein a, b, x, y, z can be 0 or 1 ; $x + y + z$ is 1, 2 or 3, when x is 0, a is 0; when z is 0, b is 0;

A and B, independently, when present, can be -O-, -COO-, -OOC-, -CH₂-CH₂-, -CH=CH-, -C≡C-, -CH=CH-CH=CH-, -O-CH₂- or -CH₂-O;

the A, B and C rings, independently of one another, are aromatic rings or alicyclic rings, where one or two carbons in the A, B or C rings that are aromatic can be replaced with a N, O or S and one or two of the carbons in the A, B or C rings that are alicyclic can be replaced with a N, O or S or a C=O group; provided that the A, B or C rings are not a 3,4-difluoropyridine ring;

Y can represent up to four substituents on aromatic rings and up to 10 substituents on an alicyclic ring where Y can be a halogen, CN group, NO₂, alkyl or alkoxy;

Z is a single bond, an -O- or a -COO- or -OOC- group, and

M is a tail group which can be:

a non-fluorinated alkyl, or ether group or R^F,

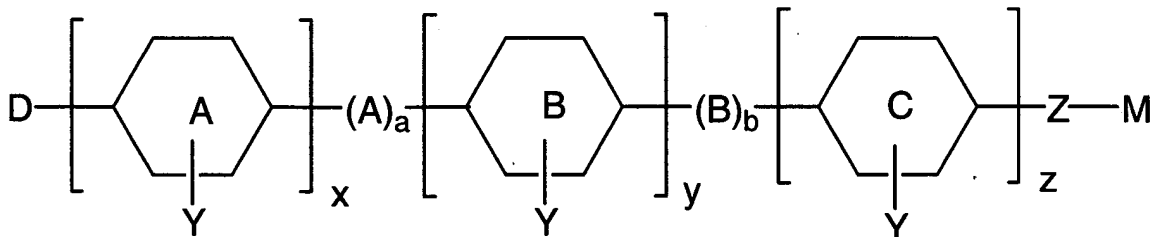
where R^F is an alkyl, or ether group which is fully or partially fluorinated.

15. (Once amended) The LC composition of claim 14 wherein R^F is:

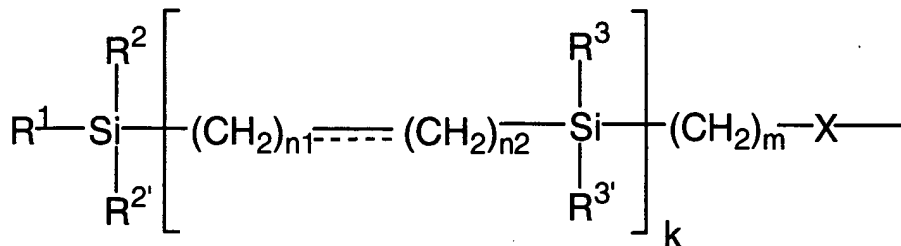


where h is 0 or an integer ranging from 1 to 10, inclusive, p, q, r, s, t, and u are 0 or integers ranging from 1 to about 20, inclusive and where $p + q + r + s + h(t + u)$ is equal to about 20, inclusive, where W is a hydrogen or fluorine.

37. (Once amended) A LC compound having the formula:



where D is:



where:

R^1 is an alkyl or alkenyl group having j carbon atoms and R^2 , $R^{2'}$, R^3 and $R^{3'}$, independently of one another, are alkyl groups having from 1-6 carbon atoms; $n1$ and m are integers from 1 to about 20; $n2$ can be zero or an integer from 1 to 20 where the dashed line indicates a possible double or triple bond; k is 0 or an integer from 1 to 10; X is oxygen or a single bond; and j is an integer from 1 to 18;

and

wherein a , b , x , y , z can be 0 or 1; $x + y + z$ is 1, 2 or 3, when x is 0, a is 0; when z is 0, b is 0;

A and B , independently, when present, can be $-O-$, $-COO-$, $-OOC-$, $-CH_2-CH_2-$, $-CH=CH-$, $-C\equiv C-$, $-CH=CH-CH=CH-$, $-O-CH_2-$ or $-CH_2-O$;

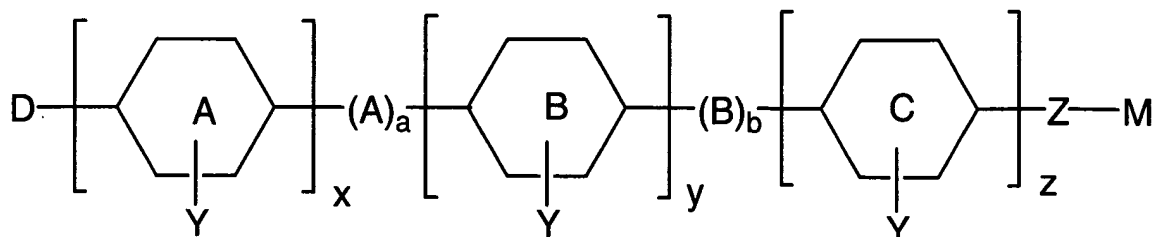
the A , B and C rings, independently of one another, are aromatic rings or alicyclic rings, where one or two carbons in the A , B or C rings that are aromatic can be replaced with a N , O or S and one or two of the carbons in the A , B or C rings that are alicyclic can be replaced with a N , O or S or a $C=O$ group; provided that the A , B or C rings are not a 3,4-difluoropyridine ring;

Y can represent up to four substituents on aromatic rings and up to 10 substituents on an alicyclic ring where Y can be a halogen, CN group, NO_2 , alkyl or alkoxy;

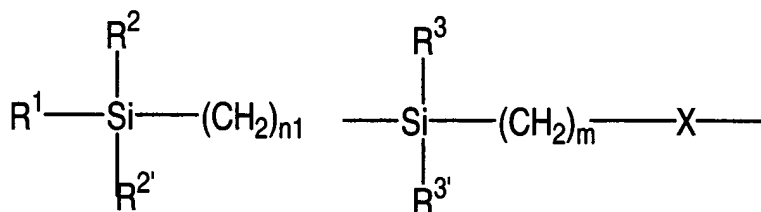
Z is a single bond, an $-O-$ or a $-COO-$ or $-OOC-$ group, and

M is R^F , where R^F is a straight-chain or branched alkyl or ether group which is fully or partially fluorinated and contains up to 20 carbon atoms.

39. (Once amended) A LC compound having the formula:



where D is:



where:

B5
 R^1 is an alkyl or alkenyl group having j carbon atoms and R^2 , $R^{2'}$, R^3 and $R^{3'}$, independently of one another, are alkyl groups having from 1-6 carbon atoms; $n1$ and m are integers from 1 to about 20;

X is oxygen or a single bond; and

j is an integer from 1 to 18;

and

wherein a , b , x , y , z can be 0 or 1; $x + y + z$ is 1, 2 or 3, when x is 0, a is 0; when z is 0, b is 0;

A and B , independently, when present, can be $-O-$, $-COO-$, $-OOC-$, $-CH_2-CH_2-$, $-CH=CH-$, $-C\equiv C-$, $-CH=CH-CH=CH-$, $-O-CH_2-$ or $-CH_2-O$;

the A , B and C rings, independently of one another, are aromatic rings or alicyclic rings, where one or two carbons in the A , B or C rings that are aromatic can be replaced with a N , O or S and one or two of the carbons in the A , B or C rings that are alicyclic can be replaced with a N , O or S or a $C=O$ group; provided that the A , B or C rings are not a 3,4-difluoropyridine ring;

Y can represent up to four substituents on aromatic rings and up to 10 substituents on an alicyclic ring where Y can a halogen, CN group, NO₂, alkyl or alkoxy; Z is a single bond, an -O- or a -COO- or -OOC- group, and M is R^F, where R^F is a straight-chain or branched alkyl or ether group which is fully or partially fluorinated and contains up to 20 carbon atoms.

B5
cont.